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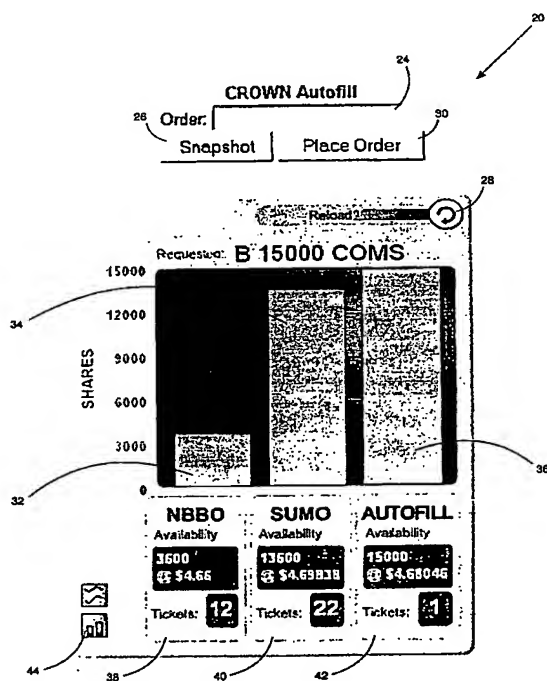
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[Continued on next page]

(54) Title: AUTOMATED EXECUTION AND RISK MANAGEMENT OF TRANSACTIONS IN SECURITIES



(57) Abstract: An automated execution and risk management system for transactions in securities is disclosed. The system facilitates quick execution of orders, particularly larger orders, of securities for various clients, including broker-dealers and their customers and for institutional investors, whose paramount objectives for any particular transaction are the speed and certainty of an automated execution for an order size typically greater than the size displayed at the national best bid and offer (NBBO). The service, in accordance with the present invention, enables various users to capture greater depth and liquidity immediately and automatically and in a single execution (or in single or multiple riskless principal transactions), unlike known systems which result in delayed or multiple executions, often at different prices, with multiple access fees and related costs. As such, the system, in accordance with the present invention, minimizes the risk that markets may move while an order is being filled. In accordance with an important aspect of the invention, as will be discussed in more detail below, orders, including larger size orders, are automatically executed as principal in one transaction and a net price that includes a size weighted average pricing synthesis of fragmented liquidity. In accordance with another aspect of the present invention, the system provides users with access to displayed and certain undisplayed liquidity efficiently in one automated net price transaction or a single or in multiple riskless principal transactions, typically in sizes greater than the displayed NBBO size. In particular, the system operator assumes the capital risk for executing orders as principal and assumes the market risk. Because the system permits an operator to trade as principal or riskless principal to fill the

complete order size on an automated basis, investors have a greater likelihood of obtaining liquidity and completing their transaction immediately.

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, *ARIPO patent* (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), *Eurasian patent* (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), *European patent* (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), *OAPI patent* (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)
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